17   *Voice-related constructions in the Austronesian languages of Flores*

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1   Introduction

This paper discusses findings of our research on voice in the Austronesian languages of Flores, Indonesia.[1] Research reported in this paper is part of a broader inquiry into voice and voice expressions in the languages of Nusa Tenggara. We begin with a brief introduction to the typology of Flores languages and their position within the Austronesian family. We then present data showing the types of voice constructions and their properties. We claim that, while typically lacking voice morphology, Flores languages show remarkably rich voice oppositions. Finally, we conclude with a discussion of issues relating to the historical question of the total loss of the Austronesian voice system in these languages and the problem of how to best analyse the data.

2   The Austronesian languages of Flores: an overview

While it is commonly accepted that Flores languages belong to the Central Malayo-Polynesian (CMP) subgroup, the precise details of the genealogical relationships between Flores languages and other languages outside Flores is far from clear. Esser includes Flores languages, together with Bimanese (spoken in Sumbawa), the languages of Sumba, and Sawu in his Bima-Sumba group. However, Blust (2008) argues against such a grouping, although he allows that there is limited evidence of a connection between a proposed Sumba-Hawu group and many of the languages of Western and Central Flores. Dyen (1965) assigns Sikka, a language in eastern Flores, to his Moluccan Linkage, but Blust (1993:263) (admitting the problem of reconstructing languages that form a linkage as defined in Ross (1988:8)) claims that there is evidence for internal grouping of CMP languages geographically into those in the lesser Sundas (which includes Flores) and those in the Moluccas. However, the evidence for the phylogenetic unity of the grouping labels of CMP and WMP (western Malayo-Polynesian) has been questioned (see Donohue and Grimes (2008) for detailed discussion, and Blust (2009) for counter-arguments.

Fernandes (1996) argues that Flores languages are legitimately grouped together as a subgroup within the CMP group.[2] We assume the family grouping shown in (1).[3]

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[2]   Note that the so-called Flores languages in (1) also include non-Flores languages. The following languages are not (all) spoken on the island of Flores: Komodo is spoken on the island of Komodo (although it is also spoken in some areas in west Manggarai); Palu'e is spoken on the island of Palu'e,

(1)   The internal subgrouping of the languages of Flores, adapted from Fernandes (1996)

       (Proto) Flores
        West Flores
            Komodo-Manggarai-Rembong subgroup
               Komodo
               Manggarai-Rembong
                  Manggarai
                  Rembong
            Ngadha-Lio-(Palu'e) subgroup
               Ngadha-Lio
                  Rongga
                  Ngadha
                  Nage-Keo
                  Ende
                  Lio
               Palu'e
      East Flores
        Sikka
        Lamaholot
        Kedang

Typologically, Flores languages are generally SVO and isolating. However, they also vary considerably, e.g., Manggarai has relatively rich cliticisation and Lamaholot has verbal agreement while Lio and Sikka do not. Examples of basic constructions in these languages are given in section 4 below.

3   Voice defined in brief

In this paper voice is defined as a language-specific system of grammatical opposition pertaining to stages of event realization and the conceptual-pragmatic relevance of the participants of the event (cf. Shibatani 2006). The opposition may be coded by at least one of the following strategies: different verbal marking (morphological and/or periphrastic, e.g. English *be+V-en* for passive), different argument marking (morphological/prepositional case, e.g. English *by*+NP[agent], Manggarai prepositional clitic *le/l*=NP[agent] (example (11) below), and different linear order (i.e. analytic coding), e.g. example (16) from Palu'e. Voice alternation often, but not necessarily always, involves a change of grammatical relations. The active-middle opposition in Sanskrit given below, for example, involves no change in linking of the actor and undergoer arguments.

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    north of Flores; Lamaholot, while spoken in eastern Flores, is mainly spoken in the small islands of Adonara and Solor, east of Flores; Kedang is spoken on the island of Lomlen east of Solor. It should be also noted that there are other small undocumented languages in central Flores (Riung, Rajong, Waerana, Manus, and Kepo' not shown in (1) but see SIL International (2001) and Arka (2005a).

[3]   Further historical linguistics research on Flores is needed for a precise internal subgrouping of Flores languages. This includes checking Fernandes' (1996) findings and gathering more data, especially about the small languages in central Flores, and verification of the inclusion of Kedang as part of the East Flores subgroup.

(2) a. *Katam   karo-ti*   (active)   Sanskrit
          mat.ACC   make-3SG.ACT.PRES
          'He makes a mat.'
     b. *Katam   karu-te*   (middle)
          mat.ACC   make.3SG.MID.PRES
          'He makes a mat (for himself).' (Shibatani 2007)

Some explanation of the keywords used in the definition of voice adopted in this paper is in order. The term 'event' covers actions, processes and states. Stages of event realization include linguistically important phases of initiation, development, and extension and/or termination.

Relevant to the initiation phase is agency or lack thereof. Many languages show a verbal opposition between volitional and spontaneous events, e.g. Japanese *omo-u* 'think (volitionally)' vs. *omow-are-ru* 'think (spontaneously)'. Split intransitive marking is known to be sensitive to the semantic opposition of volition, e.g. Actor Voice vs. Undergoer Voice verbal marking in Balinese is also used for certain intransitive verbs: *ng-enceh* 'AV.urinate (volitionally)' vs. *enceh-enceh* 'UV.urinate-RED (involuntarily)'.

Relevant to the development phase is the degree of affectedness or individuation of the patient. Languages often make a distinction as to whether or not affectedness involves a patient that is referentially distinct from the participant that initiates the action (i.e. the agent). This gives rise to the distinction between active and middle voice.

Related to the development phase is the extension and/or termination, whether an action develops in its 'normal' course, whether a change of state (i.e. result) is produced, and/or whether it involves and extends to an additional participant. This gives rise to the distinction between simple and benefactive/applicative constructions.

A particular construction may express or highlight one or more than one of these evolutionary phases of an event. For example, the Balinese stative passive *ma-* as in *ma-bukak* 'open(ed)' expresses the resultative end state without agency whereas the passive *-a, bukak-a* 'be opened by somebody' expresses termination with agency.

The conceptual and pragmatic relevance of participants in a given context is also a well-known factor in voice opposition. The conceptual and pragmatic prominence of agentivity and patientivity gives rise to an active/passive opposition.

While all languages may have ways to express the different phases of events just described, not all express those phases in a systematic way constituting a voice system. When languages do exhibit voice systems, they generally vary in how distinctions are coded. Common means of coding, as mentioned earlier, include differential verbal marking and/or argument coding.

An interesting question would be what happens when (verbal) voice coding is lost or is being lost. Our research on voice in Flores languages reported in this paper investigates this phenomenon.

We shall discuss the following points. First, the loss of (Austronesian) voice morphology in the isolating languages of Flores does not always mean the loss of voice oppositions. Second, voice-related oppositions can exist without making use of verbal marking. Third, if we compare these Flores languages with the Austronesian languages to the west, focusing on the island from Bali to Sumbawa, we will observe an interesting pattern of gradual attrition of the voice system (coding) from Balinese to Sasak, to Sumbawa and Bima, and Flores languages (Wouk 2002; Arka 2003c; Shibatani 2005). However, it is not immediately clear that this gradual picture of attrition reflects shared historical development of analytical voice in the Austronesian languages in this area.

4   Grammatical relations and Voice types in Flores Languages

All Flores languages are SVO(O) languages.   Core arguments--Actor (A) and Undergoer (U)-- are NPs, and Obliques are generally PPs. Examples (3) through (7) below illustrate this basic construction for a variety of languages:

(3)   *Ata sua   situ   kole   kawe   wua.*   (Manggarai)
       person   two   that   again   search   rattan
        'Those two men returned (from) looking (for) rattan.'

(4)   *Ana   ndau   ka   maki*   (Rongga)
       child   that   eat   rice
        'That child ate/eats rice'

(5)   *Go sorõ   na/Kewa   muko*   (Lewotobi Lamaholot)
       1s give   3s/Kewa   banana
       'I gave him/Kewa (a) banana'

(6)   *A'u   toma   au*   (Sikka-Krowe)
       1s   found   2s
       'I found you'

(7)   *'Iné   ti'i   'imu   jawa.*   (Nage Keo)
       mum   give   3sg   corn   (Baird 2002:76)
       'Mum gave her corn.'

There is evidence for the existence of grammatical subject (SUBJ), or syntactic PIVOT[4], distinct from logical subject or agent in Manggarai and Rongga (Arka and Kosmas 2005; Arka, Kosmas, and Suparsa 2007) and also perhaps Palu'e (Donohue 2005). That is, the agent argument grammatically appear in different syntactic functions, e.g. as SUBJ in an active sentence and an oblique in its passive counterpart.

Grammatical subject in these languages is structurally preverbal, and has certain exclusive properties associated with relativisation and control. In terms of coding, SUBJ in Manggarai and Rongga is an NP. When the A argument appears as an Oblique it must be a PP. The examples in (8) from the Rego dialect of Manggarai (Arka and Kosmas 2005) show a contrast in relativisation. Sentence (8a) exemplifies subject relativisation, which is acceptable, and sentence (8b) shows object relativisation, which is unacceptable. Furthermore, the patient can be relativised through passivisation as in (8c), where it is made subject, and the agent must appear in an Oblique PP.

(8)   a.   *Ata   molah   [se__ita   aku]   ghitu   rebao   ngo   gi*   (Manggarai)
            person   girl   REL   see   1s   that   just.now   go   already
            'The girl [who saw me] has just gone'

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b. **Ata molah [se aku ita __] ghitu rebao ngo gi*
 person girl REL 1s see that just.now go already
 'The girl [that I saw] has just gone'

c. *Ata molah [se__ ita l=aku] ghitu rebao ngo gi*
 person girl REL see by=1s that just.now go already
 'The girl [that I saw or that was seen by me] has just gone'

4.1 Passive Voice with prepositional obliques

An active-passive opposition with a change in structural coding, as shown in (9), is observed in Manggarai and Rongga. This change of structural coding, particularly the demotion of the Agent to Oblique, is typical for passivisation. However, the verb in these languages is not morphologically marked. As seen in these examples, the same verb forms, *pongga* (10) and *cero* in (11), are used in both active and passive sentences.

(9) a. NP_A V NP_U (active)

  b. NP_U V (PP_A) (passive)

(10) a. *Ardi pongga ana ndau*   (Rongga)
   A hit child that
   'Ardi hit the child'
  b. *Ana ndau pongga ne Ardi*
   child that hit by A
   'The child was hit by Ardi'

(11) a. *Aku cero latung=k* (Manggarai)
   1s fry corn=1s
   'I fry/am frying corn'
  b. *Latung hitu cero l=aku=i*
   corn that fry by=1s=3s
   'The corn is (being) fried by me'

As seen from example (11), in addition to agent demotion, the voice change in Manggarai is also encoded by a change in subject co-referential cliticisation, *=k* vs. *=i*. In the active construction (11a), the agent '1s' is subject and the clitic *=k* co-indexes the free NP *aku*. In the passive counterpart (11b), the patient *latung* 'corn' is subject, and the agent *aku* '1s' is an oblique, appearing with a prepositional clitic *l=*. Crucially, the co-indexing clitic is *=i*, in agreement with the NP *latung*.

When both the clitic and its free co-indexed NP are present, they are both associated with subject, but structurally the enclitic appears to be in grammatical subject position, and the free NP in the Topic position (see Arka and Kosmas 2005). That this co-indexed argument is subject is shown by the fact that it is the sole argument of the intransitive clause as exemplified in (12) below. Furthermore, the clitic itself can appear as the subject without a cross-referenced NP in intransitive and transitive clauses.

(12)   a.   **Hia** *pa'u eta   mai   bubung   mbaru   hitu=**i***.   (Manggarai)
           3s   fall above from   top.roof house   that=3s
           '(S)he fell down from the roof top of the house.'
       b.   **Hi   Kode**   *ka'eng   wa   tana=**i***.
           ART monkey   stay   down   ground=3s
           'The monkey lives on the ground.'

(13)   a.   *Ongga   aku=**i***.   (Manggarai)
           hit   1s=3s
           'He hit me.'

       b.   *Iti   wa   tanah   ghitu=i.*
           that down   soil   that=3s
           'He is down there inside the ground.'

4.2   Atypical passive or undergoer voice

Languages of central and eastern Flores show a structural alternation of the type shown in (14). Examples from Sikka, Palu'e and Lio are given in (15)-(17). Note that the A argument in the non-active constructions (b) cannot be backgrounded. It is neither placed after the verb, nor does it appear as a PP, as occurs in the Manggarai/Rongga passive. The A argument is also often obligatorily present when the U is fronted.

(14)   a.   NP$_A$ V   NP$_U$ (active)

       b.   NP$_U$ NP$_A$ V   (passive or inverse)

(15)   a.   *Petrus   gita ilin   ia*   (Sikka)
           Petrus   see   mountain   that
           'Petrus saw the mountain'
       b.   *Ilin   ia   Petrus   gita.*
           mountain   that Petrus   see
           'The mountain, Petrus saw'
       c.* *Ilin   ia   toma gita é'i   Petrus*
           mountain   that can   see by   Petrus

(16)   a.   *Ia   cube   vavi vaʔa.*   (Palu'e)
           3sg shoot   pig   that   (Donohue 2005)[5]
           'He shot that pig.'
       b.   *Vavi   vaʔa   ia   cube.*
           pig   that   3sg shoot
           'That pig, he shot (it).' ~ 'That pig was shot by him.'
(17)   a.   *Petrus   tebo   ana   ghea*   (Lio)
           Petrus   hit   child   that
           'Petrus hit the child'
       b.   *Ana   ghea   Petrus   tebo*
           child   that   Petrus   hit
           'The child, P hit (him), or the child was hit by Petrus'

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[5]   Palu'e examples are presented in a phonemic transcription (see Donohue 2005).

There is evidence in Palu'e (Donohue 2005), Sikka (Sedeng 2000) and Lio (Sawardi 2000) that the structure with a fronted U as in the (b) sentences in examples (12)-(14) is a non-active voice construction. Donohue argues that it is a passive in Palu'e. Evidence comes from the fact that the U argument in (16) gains promotion to grammatical subject. For example, he demonstrates that it is structurally in subject position, not in preclausal topic position. It also acquires other subject properties such as simple quantifier float, conjunction reduction, and purposive clauses (see Donohue 2005 for details).

This passive appears to be an atypical passive. The A is still encoded as a preverbal NP and is obligatorily present. In Donohue's analysis, this A argument is an Oblique-like argument, rather than a core argument, mainly based on the evidence that this preverbal A cannot launch quantifier float associated with the simple quantifier *tetiʔón* 'all' as seen in (18b). Simple quantifier float is a property of core arguments (A/S/P) in Palue.

(18) *a. Konen   bere   somu   vaʔa   tetiʔón.*
        3PL   chop   garlic   that   all
        'They chopped all of that garlic.'
        ~ 'All of them chopped that garlic'

    b. *Somu   konen   bere   tetiʔón.*
        garlic   3PL   chop   all
        'They chopped all of the garlic.'
        ~ 'The garlic was all chopped by them.'
        * 'All of them chopped the garlic.'

Applying a core-index analysis (Arka 2005b) to A of the P-A-Verb in Palu'e, we can determine the core-oblique status of A more precisely. Its core index is 0.87 (i.e. satisfying six out seven core properties). It is therefore classifiable as a core argument. The following core properties are identifiable in Palu'e on the basis of Donohue's description: (i) structurally in A-Verb-P, A is in subject position and P in object position, (ii) allowing simple quantifier float, (iii) ability to bind a core reflexive argument, (iv) typically NPs, (v) participate in analytic voice alternation, vi) subcategorised for, and vii) obligatory. The preverbal A definitely satisfies properties (iii), (iv), (v), (vi) and (vii). Structurally, the position of A in P-A-V is analysable as [Spec, VP] rather than an adjunct position; hence A is also a core position. Overall, A of the P-A-Verb structure is not significantly demoted to Oblique status. Its core index of 0.87 typologically signifies a high degree of coreness (i.e. a typical core argument or core type 1 in Arka's (2005b) typology). In this analysis, the P-A-Verb in Palu'e is more like the Undergoer or Objective Voice (UV/OV) construction in Indonesian (Arka and Manning 2008) or Balinese (Artawa 1994; Arka 2003a) as exemplified below. This is what Shibatani (2009) calls Patient Focus (PF). UV or PF is not Passive Voice, as the A argument is not an oblique.

(19) a. *Saya   (mem-)beli   buku   itu*   (Indonesian)
        1s   (AV-)buy   book   that
        'I bought the book'

(20) b. *Buku   itu   saya   beli*
        book   that   1s   UV.buy
        'The book, I bought'

(21) a. *Tiang   numbas   bawine*   (Balinese)
        1   AV.buy   pig-DEF
        'I bought the pig'

b. *Bawi-ne   tumbas   tiang*
    pig-DEF   UV.buy   1
    'The pig, I bought'

Lamaholot also shows Undergoer fronting but differs from Lio, Sikka and Palu'e in that the fronting triggers pronominal agreement or co-indexation.[6] In a canonical SVO clause we find no agreement (18a). However, the bound pronoun *-roʔ* in (22) co-indexes the NP *Kewa*.

(22) a. *Go   sorõ   na/Kewa   muko*   (Lewotobi Lamaholot)
          1s   give   3s/K   banana
          'I gave him/Kewa a banana'
      b. *Kewa   go   sorõ-roʔ   muko*
          Kewa   1s   give-3s   banana
          'Kewa, I gave him a banana'

The acceptability of the structure with fronted U NP without *-roʔ* is degraded as seen in (23).

(23) ?* *Kewa,   go   sorõ   muko*
          Kewa   1s   give   banana
          'Kewa, I gave him a banana'

However, the bound pronoun can appear without a fronted NP as seen in (24), where *-roʔ* is understood as the Benefactive argument.

(24) *go   sorõ-roʔ   muko*
      1s   give-3s   banana
      'I gave him banana.'

In short, the bound pronoun *-roʔ* must be associated with the U of a transitive verb, or the Benefactive of a ditransitive verb. In the ditransitive structure, the Benefactive is the U that gets the privilege to be (co-) indexed on the verb.[7] Importantly, the free co-indexed NP cannot come postverbally.[8] The evidence for this comes from the contrast in (25). Sentence (25a) is unacceptable because of an attempt to co-index *-roʔ* with the following Benefactive *Kewa*. For this sentence to be acceptable, *-roʔ* must be absent as seen in (25).

(25) a. * *Muko   peʔe   go   sorõ-roʔ   Kewa*
             banana   that   1s   give-3s   Kewa
             FOR: 'The banana, I gave (to) Kewa'
      b.   *Muko   peʔe   go   sorõ   Kewa*
             banana   that   1s   give   Kewa
             'The banana, I gave (it to) Kewa'

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[6]   Some speakers regard pronominal co-indexation as obligatory in some contexts but not in others. Some speakers even regard it as always obligatory. Further research based on texts of real language use is needed to investigate its distribution.

[7]   This could be taken as evidence for prominence, further discussed in subsection 3.5 below.

[8]   This constraint must be pragmatically motivated: the bound pronoun on the verb anaphorically refers to an established referent in the discourse. The NP that introduced this referent must therefore precede the bound pronoun.

There seems to be a third person animacy restriction on the type of fronted U NP in Lamaholot, as noted by Nishiyama and Kelen (2007). Thus, the downgraded acceptability of (25a) might also be due to this animacy constraint of *-roʔ*; i.e., the fronted NP *muko* 'banana' is inanimate and is incompatible with *-roʔ*. However, this constraint does not hold across all Lamaholot dialects, or even among all speakers of the Lewoingu dialect (Nishiyama and Kelen 2007: chap 15). The following from the Nusa Tadon dialect of Lamaholot shows that *-roʔ* can co-index a fronted inanimate NP.

(26) *Wataʔ   ne   goʔ   kã-roʔ*   (Nusa Tadon Lamaholot)
      corn   that 1s   eat-3s   (Japa 2000: 39)
      'The corn, I ate (it)'

In addition, there is evidence that the structure with Undergoer fronting in Lamaholot changes the meaning. Nagaya (2009) reports a realis/past vs. irrealis/future contrast shown in (27). This would not be expected if the structure with Undergoer fronting in (27b) were simply a pragmatically marked variant of the structure in (27a).

(27) a. *Nius   n-enu   tuaʔ   teʔẽ*   (Lewotobi Lamaholot)
          Nius   3sg-drink tuak   this.poss   (realis/past)
          'Nius drank this tuak.'
      b. *tuaʔ   teʔẽ,   Nius   n-enu*   (irrealis/future)
          tuak   this.poss Nius   3sg-drink
          'This tuak, Nius will drink (it).'   (Nagaya 2009)

That a voice/diathesis alternation may involve semantic contrast is common across languages. For example, active-middle opposition correlates with a contrast in reflexivity, and applicative-non applicative opposition correlates with a contrast in affectedness of the applied argument. In a language with more than one passive, different types of passive encode certain semantic contrasts, e.g., volitionality, as in Indonesian *di-* and *ter-* in (28).

(28) a. *Orang   itu   di-tembak*   (Indonesian)
          person   that   PASS-shoot
          'the person was (deliberately) shot'
      b. *Orang   itu   ter-tembak*
          person   that   PASS-shoot
          'The person was (accidentally) shot'.

Recall that the Palu'e non-active structure is analysed by Donohue (2005) as a passive, because the A is regarded as an Oblique. The equivalent structure in Lamaholot could be analysed in a similar way. However, there are two good reasons for not adopting a passive analysis for the Lamaholot case.

First, as is the case in Palu'e, when a core index analysis is applied to Lamaholot, the A argument in the P-A-Verb structure shows a high core index. On the available descriptions of Lamaholot (Japa 2000; Nishiyama and Kelen 2007; Grangé 2009; Nagaya 2009), core arguments in this language show the following properties: i) verbal prefix agreement (associated with A) or enclitic agreement (associated with P), ii) (core) argument positions (in A-Verb-P structure, A and P are in argument positions, and in P-A-Verb structure, A is analysable as being in argument position [Spec,VP] (Japa 2000) not in adjunct position), iii) typically NPs, v) subcategorised for, and vi) typically obligatory. In addition, Nagaya reports that coordination is associated with A, even in the P-A-Verb structure as seen in the examples (29b) below. Given all these characteristics of A, it can

be concluded that A of P-A-Verb is highly core (a maximum core index of 1.00). Thus, there is no evidence that the coreness of A is significantly downgraded (to oblique status to warrant a passive analysis) when A appears in the alternative structure of P-A-Verb.

(29) a. *na   bəŋo go,   kədiʔ   gwali.*
          3sg   hit   1sg   then   return
          'S/he hit me, and (s/he) returned.'
      b. *go   na   bəŋo, kədiʔ   gwali.*
          1sg   3sg   hit   then   return
          'Me, s/he hit, and (s/he) returned.'

Second, from what we currently know of the Austronesian languages in eastern Indonesia (Klamer 2002; Arka 2003c; Himmelmann 2005), features such as grammatical subject/pivot, syntactic control and voice alternations of the kind encountered in the Austronesian languages of western Indonesia such as Indonesian and Balinese are not typical of this area. Lamaholot might be different, but more language-specific evidence is needed to confirm whether fronting of an Undergoer NP in this language may indeed involve some kind of change in grammatical status of the arguments and therefore a change in voice. Nagaya analyzes P of the P-A-Verb structure as a topicalised object. That is, the structural change of P does not involve a voice alternation. [9]

4.3   Intransitive-transitive alternation and applicativisation

In our conception of voice, applicativisation is part of the voice system (cf. Verhaar 1984; Davies 2005). Applicativisation typically adds or promotes a non-actor argument to core status in the argument structure of the base verb. It transitivises an intransitive base, to which the voice alternation that picks up the non-actor as subject can then be applied. Thus, non-active voice constructions with intransitive roots require applicativisation (e.g. in Balinese, Arka 2003: chapter 5). Consider the examples in (30) from Balinese. The verb *edot* 'want' is intransitive; it can take a complement clause with subject control as seen in (30a). However, the complement can be contrastively focused by fronting. The fronted complement grammatically functions as subject. The relativiser *ane* must be used (30b). Importantly, the verb must appear with the applicative suffix *-ang*; otherwise the structures are not acceptable (30c-d).

(30) a. *Cang   edot   [makaad   joh]*   (Balinese)
          name   want   go   far
          'I wanted to go far away'
      b. *Makaad   joh   ane   edot-ang   cang*
          go   far   REL   want   1
          'Going far away is what I wanted'
      c. * *Makaad   joh   ane   cang   edot*
          go   far   REL   1   want
          'Going far away is what I wanted'

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[9]   Certain tests such as control and clausal adverbial placement tests show that in Nusa Tado Lamaholot the fronted U NP acquires syntactic subject properties (Japa 2000). In this view, the P-A-verb structure is analyzed as having a voice type different from the A-Verb-P structure (Japa 2000). We have not been able to verify this. Whether this is indeed the case across dialects of Lamaholot is a matter for further research.

d.* *Makaad   joh   ane   edot   cang*
    go   far   REL   want   1
    'Going far away is what I wanted'

Being of the isolating type, Flores languages have no applicative and no voice morphology. However, the structural effect of the intransitive-transitive alternation, which is expressed by the applicative and voice morphology in Balinese, is observed in Flores languages. As expected, the alternation is expressed by a change in construction type which utilises the voice structure given in (14). Consider the examples from Sikka in (31) below. The verb *deri* 'sit' is intransitive (31a), and cannot be used in an active transitive structure (31b) (cf. the unacceptability of Indonesian (30b) above). However, Sikka allows a transitive alternation with *deri* (31c). Crucially, this structure must have the U argument fronted to the subject position. This is arguably an instance of an Undergoer Voice construction without an applicative affix or any voice morphology on the verb.

(31) a.   *Wae   buang   ia   **deri**   ei   kadera*   (Sikka)
          face   white   that   sit   P   chair
          'The pretty girl sat on the chair'
  b. **Wae   buang   ia   **deri**   kadera*
          face   white   that   sit   chair
          'The pretty girl sat on the/a chair'
  c.   *Kadera   ia   wi   wae   buang   ia   **deri***
          chair   that   REL   face   white   that   sit
          'It is that chair which was sat on by the pretty girl'

4.4 Middle

Certain verbs allow an intransitive-transitive alternation which is achieved by placing the same verb form either in an intransitive frame of [NP V] or in a transitive frame of [NP V NP]. An agentive verb such as *zhio*[10] 'bathe' (32) in Rongga and *sebong* in Manus (33) in the intransitive frame gets a middle interpretation whereas in the transitive frame it gets an active interpretation. The same pattern is observed in other Flores languages in central and western Flores such as Ende, Nage/Keo, Waerana and Manggarai.

(32) a.   *Ana   ndau   zhio*   (Rongga)
          child   that   bath
          'the child took a bath'
          (or the child bathed himself)'
  b.   *Ine   zhio   ana   ndau*
          mother   bathe   child   that
          'Mother bathed the child.'

(33) a.   *Anak   koe   itu   sebong*   (Manus)
          child   small   that   bathe
          'The child took a bath/bathed himself.'
  b.   *Ene   itu   sebong   anak   koe   itu*
          mother   that   bathe   child   child   that
          'The mother bathed the child.'

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[10] In the orthography adopted by a group of Rongga speakers, *zh* represents the alveolar approximant [ɹ], which is phonemic in Rongga.

Lamaholot utilizes an Undergoer suffix on the verb to exhibit split intransitivity.[11] The patientive intransitive verbs take the undergoer suffix and agentive intransitives do not take the suffix, e.g. *goka-na* 'fall-' vs. *pla'e* 'run'. Some verbs, such as *buka* 'open' and *həbo* 'bathe' show a three-way contrast, between a suffixed (patientive/middle) intransitive (34a), a bare (middle) intransitive (34b), and an active transitive (34c).

(34) a. *Goe*   *həbo=k*   (intransitive) (Lamalera Lamaholot)
          1sg   bathe=1sg
          'I took a bath/bathed myself.'

      b. *Goe*   *həbo*   (intransitive)
          1sg   bathe
          'I took a bath/bathed myself.'

      c. *Goe*   *həbo ana*   *nawe*   (transitive)
          1sg   bathe child   that
          'I bathed the child.'

4.5 Three-place predicates and dative shift alternation

Constructions similar to dative shift are widespread in Flores languages. Example (35), from Rongga, illustrates how the change from transitive to ditransitive occurs with no change in the form of the verb. This kind of transitive-ditransitive alternation generally would be encoded by applicative morphology in Indonesian-type languages.

(35) a. *Ardi*   *indi*   **ndoi**   (**pe**   **ndia**   **ne**   **ja'o**)   (transitive)
          name   bring   money   to   here   with   1s   (Rongga)
          'Ardi brought money (here)(for/to me).'

      b. *Ardi*   *indi*   **jao**   *(ko)*   **ndoi**   (ditransitive)
          name   bring   1s   ko   money
          'Ardi brought you money'

      c.* *Ardi*   *indi*   *(ko)* **ndoi** **jao**

On semantic grounds, the transitive construction with an undergoer/theme argument (i.e. the (a) sentences above) is more 'basic' than the ditransitive one. The ditransitive one encapsulates a complex event that includes the event conception of the transitive one. For example, the ditransitive structure 'bring (for)' (35b) implies the 'bringing' event of (35a) which extends to a benefactive argument, and this benefactive/goal argument is also given semantic/conceptual/grammatical prominence.

The new grammatical prominence is evidenced by the acquisition of first object structural/grammatical properties. The benefactive argument now must come in the first object position, and the theme argument appears as the second object. Swapping these objects is not permitted; hence the unacceptability of (35c). Note that the former direct object, now demoted to second object, is optionally marked with the particle *ko*, which marks weakened or demoted objects in Rongga.

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[11] Verbal affixation in Lamaholot, including the semantics of the intransitive split, is remarkably complex and possibly varies across dialects (Arka 2000; Japa 2000; Nishiyama and Kelen 2007; Grangé 2009). In Dixon's (1994) terminology, the system in Lamaholot allows split-S as well as fluid-S (Arka 2000; Grangé 2009) .

Ditransitives are not generally restricted to those with benefactive/goal arguments. They may also include locatives, as exemplified in (36) with the verb *mula* 'plant', also from Rongga. (36a) is monotransitive; the locative is an adjunct PP and the theme is an object. (36b) is ditransitive; the locative is an object NP and the theme is the second object with *ko*. (36c) is monotransitive; the locative object has a particle *ko* and the theme is downgraded to an oblique, marked by *ne* 'with'. (36d) is monotransitive, like (36c), except that the locative (first) object comes without *ko*. (36d) is ditransitive with the second object without *ko* and its acceptability is degraded.

(36) a. *Ja'o   mula   (ko)   nio   (kana)   **one   uma   ja'o***   (transitive)
          1s   plant   ko   coconut   all   in   garden   1s   (Rongga)
          'I planted (all) coconuts in my garden.'

      b. *Ja'o   mula   **uma   ja'o   ko   nio   kana***   (ditransitive)
          1s   plant   garden 1s   ko   coconut   all
          'I planted the full area of my garden with coconuts'

      c. *Ja'o   mula   **ko   uma   ja'o***   ne   nio   lepa*   (transitive)
          1s   plant   ko   garden   1s   with   coconut   finished
          'I planted the full area of my garden with coconuts'

      d. *Ja'o mula uma ja'o ne nio lepa*. [without *ko* for the first object].

      e. ?* *Ja'o mula uma ja'o nio kana.* [without *ko* for the second object]

The constraints on *ko* appear to reflect argument prominence. It has been recognized in the literature that argument relations, whether they are grammatical (subject, object, obliques; core and non-core) or semantic (agent, benefactive, goal, theme, etc.), are structured in terms of prominence or hierarchy (Keenan and Comrie 1977; Bresnan and Kanerva 1989; Bresnan 1995; Manning 1996; Bresnan 2001; Arka 2003a, among others). For example, Object is more prominent than Oblique and in case there are two objects direct/first object is more prominent than secondary object (Keenan and Comrie 1977). Thematically, it has been recognized that beneficiary/goal is more prominent than locative (Bresnan and Kanerva 1989).

Thus, we observed the following constraints on *ko* with objects in Rongga: (i) the object of a monotransitive structure is optionally marked by *ko*; (ii) the first object of a ditransitive structure cannot be weakened (i.e. marked with *ko*) as it must be superior to the second object; (iii) the second object of ditranstive generally takes *ko* as this is a natural way of marking a secondary object; (iv) the second object can be without *ko* so long as the first object is also thematically prominent (i.e. beneficiary/goal). Constraint (iv) accounts for why in the ditransitive structure with a locative first object as in (36b), *ko* is obligatory; otherwise the sentence is not quite acceptable (36d).

Semantically, the alternation also gives rise to a change of meaning. The promoted locative argument in (36), for instance, is understood to be 'fully' affected by the action of planting. As the translation shows, the ditransitive structure (36b) implies the area of the garden is fully covered with coconuts. This implication is not available for the transitive construction (36a).

The possible transitive alternations exemplified above for Rongga can be summarized in (37). (Whether one or two alternations are allowed depends on the verb; hence, it is lexically constrained.)

(37)   a.   NP$_{A:SUBJ}$V   (*ko*)NP$_{U:OBJ1}$ (PP$_{OBL}$)

       b.   (i)   NP$_{A:SUBJ}$V   NP$_{U(BEN/GOAL/LOC):OBJ1}$ *ko*=NP$_{U:OBJ2}$

            (ii)   NP$_{A:SUBJ}$V   NP$_{U(BEN/GOAL/LOC):OBJ1}$ (PP$_{OBL}$)

There is also evidence that the argument prominence discussed above places a constraint on argument linking of the subject in transitive sentences. According to this constraint, in a non-symmetrical system, only the most prominent core argument participant can be subject. Thus, the A argument of a transitive verb is by default selected as Subject. In passive, where A is not available or demoted, the basic undergoer, or the promoted undergoer, is available as the most prominent argument and is selected as Subject. The demoted undergoer of a ditransitive structure, however, cannot be selected as subject.

Rongga shows a non-symmetrical system. The asymmetry in subject selection of non-actor arguments due to the prominence constraint is observed in this language. Thus, given a monotransitive of the type (37a) where the theme is OBJ, exemplified by (36a), the theme is Subject in the passive:

(38)   a.   *Nio   ndau   mula   one uma   ne   ja'o   (Rongga)*
            Coconut   that   plant   in   garden by   1s
             'The coconuts were planted in the garden by me'

However, in a ditransitive structure of the type (37b) where the theme is the second OBJ, exemplified by (36b), the theme cannot be the passive subject:

(39)   *   *Nio   ndau   mula   uma ja'o   ne   ja'o*
            coconut   that   plant   garden   1s   by 1s
            'The coconuts were planted in the garden by me'

For the ditransitive verb, the first OBJ of the active structure alternates with passive subject. Thus, being the first OBJ of the ditransitive structure in (36b), a locative argument may become a passive subject, as seen in (40). Note that the theme appears with *ko*, without which the acceptability of this sentence is degraded.

(40)   *Uma   ja'o   mula   lepa   ko   nio   ne   ja'o*
        garden   1s   plant   finish   ko   coconut   by   1s
        'The my garden was all covered with coconuts that I planted'

4.6   Causative and anticausative alternations

In the definition of voice adopted here, causative and anticausative alternations are also part of the voice system. These constructions express different conceptions of event development. For languages with voice morphology, there is often a restriction on the formation of certain voice constructions in relation to (anti)causativisation. For instance, in Balinese, only patientive or stative intransitive bases which are expressed by bare forms (i.e. forms also used for undergoer voice) can undergo morphological causativisation with –*ang*. Thus *ulung* 'UV.fall' can take the -*ang* suffix to form *ulung-ang* 'fall-CAUS', but

ngeling 'AV.cry' cannot (*_ngelingang_ 'AV.cry-CAUS').[12] Also, only causative transitive verbs of the form of *AV.V-ang* can undergo anticausativisation in Balinese (Arka 2003b). Thus, *nyenik-ang* 'AV.small-CAUS' or 'make something small' (41a) can be used to mean 'become small' (41b) when the agent is unexpressed and the patient is in preverbal position.   While the verb form remains formally causative, the meaning of the anticausative structure is distinct. The anticausative structure (41b) expresses the effect or the inchoative aspect/function of the category/concept of causation expressed by (41a).

(41) a. *Nyoman*   ***nyenikang***   *api-ne*
                                   N-cenik-ang
              Name   AV-small-CAUS   fire-DEF
              'Nyoman made the fire smaller'
        b. *Api-ne*   ***nyenikang***
                                   N-cenik-ang
              fire-DEF   AV-small-CAUS
              'The fire became small'

Similar instances of (anti)causative alternation are found in Flores languages. The following examples are from Rongga (Arka et al, 2007). The same verb form *nggoli* 'roll' expresses a different event conception depending on the construction it is used in. In the intransitive construction of [NP V], it may be conceptualised as patientive or passive as in (42a), or self-instigated or middle (42b). The animacy of the sole NP and/or the context is critical. In the transitive construction of [NP V NP] (42c), it is conceptualised as an active causative action. Given the absence of any morphology, it is unclear which structure could be analysed as basic. If *nggoli* is analysed as basically transitive, then intransitive structures (42a) and (42b) could be regarded as the anticausative/passive and middle alternations respectively. Alternatively, if *nggoli* is basically intransitive, then the transitive counterpart is its lexical causative counterpart.[13]

(42) a. *Watu ndau*   ***nggoli***   (Rongga)
              stone that   roll
              'The stone rolled (or was rolled)'
        b. *Jao* ***nggoli***
              1s   roll
              'I rolled (myself)'
        c. *Ja'o* ***nggoli*** *watu*   *ndau*
              1s   roll   stone   that
              'I rolled the stone or I made the stone roll'

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12   Note that ngelingang is an acceptable form for an applicative verb as in the example below.
        Ia   ngelingang   meme-ne
        3SG   AV.cry-APLL   mother-3POSS
        'S/he cried for his/her mother.'
        *'S/he made his/her mother cry.'
13   The question of 'basic-ness' is perhaps irrelevant if one assumes that this verb, like many others, has multiple subcategorisations at the lexical level, each of which is activated by a specific construction in use. We will not pursue this issue any further in this paper.

5   Concluding remarks

In this short paper we have presented data from the Austronesian languages of Flores Indonesia. In this last section, we provide a summary, followed by discussion of issues arising from the present study.

As noted at the beginning of this paper, typologically the salient feature of these languages is their isolating type. At some point during their history, all of these languages have lost the rich verbal voice morphology found in western Austronesian languages and reconstructed for Proto-Austronesian. To some extent, the loss of verbal morphology is compensated for by the development of bound pronominal forms in Lamaholot in the eastern part of Flores and pronominal clitics in Manggarai in the western part.

These bound forms, however, do not function in the same way in both languages. In Manggarai, the alternation of pronominal co-indexing is a diagnostic test for a change in grammatical relations, and therefore also clear diagnostic evidence for voice alternation. In Lamaholot, the situation is slightly different. The undergoer bound pronominal on the verb provides coding for split intransitivity, which is done by verbal voice morphology in other Austronesian languages such as Balinese. It is unclear, however, whether the pronominal suffix on the transitive verb which is often triggered by undergoer fronting encodes an undergoer voice alternation.

The other languages, mainly in central Flores, are at the far end of the isolating continuum.

However, the development of Flores languages into the isolating type with the loss of verbal voice morphology is not followed by a (total) loss of a voice system. Different kinds of voice (active voice, passive voice, undergoer voice, middle voice, (anti)causative, and dative shift) are attested in Flores languages. The distinctions are mainly coded constructionally. While further research on the semantics and pragmatics of voice in Flores languages is needed, our preliminary research has revealed the subtlety and richness of the meaning contrasts encoded by constructionally-coded voice distinctions in these languages.

In contrast with wesern Austronesian languages, the loss of verbal voice morphology in Flores languages leads to a less systematic contrast among voice types, and a reduced number of voice distinctions in the individual languages on this island. Grammatical relations and voice alternations are arguably harder to tease apart in these languages than in Indonesian-type or Philippine-type languages.

In section 3 we provided a broad conceptually-based definition of voice. Using this definition, the richness of alternative argument realisations typically featuring voice alternations can be compared across the languages of Nusa Tenggara. The alternations may employ reflexes of Proto-Austronesian morphological coding, other morphological coding, or in the case of the languages of central Flores, no verbal coding at all.

For example, cases of split-intransitivity in Lamaholot and Balinese are both analysed as part of the system of voice oppositions. The two languages differ, however, in their coding: Balinese marks the agentive intransitive employing the AV (Actor voice)/AF (Actor Focus) nasal prefix marking (*N-*), a marker traced back to PMP *maN-* or PAN *-um-*, which signalled 'active' in the old systems (Blust 2002; Ross 2002 and the references therein). Lamaholot, however, marks the patientive intransitive, employing pronominal marking coding, typically used for the U argument in the transitive verb. The difference appears to reflect different historical development. Other Flores languages (Sikka and Palu'e in eastern Flores and Manggarai in western Flores) also have bound pronominal forms, possibly used on verbs. In contrast with Lamaholot, however, such pronominal coding is not employed to express split intransitivity. Languages of central Flores such as Rongga and Ngadha are extremely isolating. There is no bound pronominal marking in

these languages. And there is no intransitive split phenomenon in these languages expressed by other means either.

Other phenomena such as dative shift and (anti-)causativisation also fall into voice in our definition. We have observed that, in the absence of any verbal morphology, voice distinctions rely solely on analytic coding. The verb form remains the same in different types of voice. A passive construction, for example, may be simply marked on the A argument by a preposition as in Manggarai and Rongga (section 4.1).

Our findings clearly show that voice without voice morphology in the Austronesian languages of Flores is attested. A detailed study of passives without passive morphology in Manggarai is given in Arka and Kosmas (Arka and Kosmas 2005).

A number of issues arise from our study. The first is historical. The precise answer to the question of historical development of the complete disappearance of Austronesian voice morphology in Flores languages is a matter for further research.

The remaining issues are typological/theoretical. One important question is whether the 'non-active' constructions found in Flores languages are best analysed as passive, as inverse, as undergoer voice, or as undergoer focus. There has been some disagreement whether Focus systems in the Philippine/Formosan languages are Voice systems as found in languages like English, and if not to what extent they are different. Typologists such as Foley (2008), Himmelmann (2002a; 2002b; 2005), and Ross (2002; 2006) consider the Focus System a voice system. Formal linguistic analyses of different theoretical persuasions also treat the Focus system as a voice system.

Shibatani (2009), however, argues that the Focus system is not the same as a voice system. The focus alternation does not change clause-level grammatical relations whereas the voice system does. Thus, different Focus structures may belong to the same voice type. In his analysis, AF (Actor Focus) shows the alignment of subject/actor as (grammatical) Topic whereas PF (Patient Focus) shows the alignment of patient/object as Topic. In PF, the actor is in his analysis still subject. AF and PF are therefore both active voice.

It should be noted that Shibatani's notion of subject is not exactly the same as surface SUBJ (or Pivot) as used in this paper (see footnote 4). Rather, it is a logical subject (or Actor) that is a core argument (equivalent to what Manning (1996) and Arka (2003a) call argument-structure subject (a-subject).

It should also be noted that Shibatani's analysis is in line with other earlier analyses which conclude that UV is not passive (Foley 1998; Arka 2003a; Katagiri 2005; Foley 2008, among others). The term active voice should not be taken as the exact equivalent of actor voice (or vice versa). In this paper, we adopt the analysis that Austronesian Focus system is part of wider system of voice. It is a voice system because it regulates the mapping of arguments onto surface grammatical relations.

Returning to Flores languages, it has been argued that the languages on this island such as Manggarai (Arka and Kosmas 2005) and Palu'e (Donohue 2005) show cases of passive voice without passive morphology. The relevant examples from Manggarai are repeated below:

(43)   a.   *Aku   cero   latung=k*   (Manggarai)
            1s   fry   corn=1s
            'I fry/am frying corn'
       b.   *Latung   hitu   cero   l=aku=i*
            corn   that   fry   by=1s=3s
            'The corn is (being) fried by me'

The alternation in (43) shows a change of the status of the actor (*aku*): it is subject (core) argument in (42a) but an oblique in (42b). Clear evidence for its oblique status is

observed from its structural position and PP coding. More convincing evidence, taking into account these structural and marking properties, comes from the investigation of its core index (i.e. degree of coreness).

Core properties in Manggarai show at least the following six properties: i) subcategorised for, ii) obligatory, iii) NPs rather than PPs (which are obliques), iv) structurally in core (S/A/P) argument positions, v) possibly realised as core clitics, and vi) binder of a reflexive. The A *aku* in (43a) (active) shows a prototypical core with a core index of 1.00 (i.e. satisfying all these six core properties), in addition to satisfying subject properties in Manggarai such as subject position, the only argument targeted in control in purposive and participial/nominalised (complement) clauses and relativisation (see Arka and Kosmas (2005) for details). Its counterpart in (43b), *l=aku*, shows a very low degree of coreness, a core index of 0.33 (i.e. a satisfying at best the first two out of six).

It should noted that the oblique A in (43) does not appear to be a typical oblique as it is not optional. However, a transitive verb in Manggarai may have a clitic, e.g. *=d* as in (44), to encode a passive structure. In this example, the Argument marked by *le (l=ise)* is optional. The optionality makes this prepositionally-marked actor a typical oblique.

(44)   *Poli=s   emi=d   (l=ise)   bao   surak   situ.*
       already=3p   take=POSS   by=3p   just.now   letter   that.p
       'The letters have been taken (by them) (just now)'
       (Lit. The letters were already, the taking (of them) just now (by them).'

In short, we have good evidence that Manggarai shows a passive alternation, possibly without voice morphology, and that the actor of the passive structure has a low degree of coreness (i.e. an Oblique).

However, the question is whether there is also evidence for a UV/PF construction in Manggarai. That is, do we have a structure where the undergoer is syntactic Subject/Pivot and the actor remains as a core. This is a difficult question given our current understanding of Manggarai grammar. However, a structure of the type in (45), quoted from the story Tura Kambu Lawang, Manggarai Timur, could be a UV/PF candidate. What is special about this structure is the expression of the Actor: it is realised as a sentence-initial NP but is also anaphorically cross-referenced by the PP *l=iha (i.e.,* obliquely marked). This A argument is arguably more core-like than the A counterpart in (43) above, where it is simply backgrounded as a PP. On this analysis, and on the analysis that the undergoer Empo Ete is a postposed surface SUBJ (or Topic in Shibatani's terminology), then sentence (45) could be an instance of UV/PF in Manggarai. More research is needed to investigate how widespread this kind of construction is.

(45)   *Hi   Kambu Lawang   hitu   kawe-kawe   l=iha   Empo Ete*
            ART *Kambu Lawang*   that   search-REDUP   by=3SG   *Empo Ete*
            'Kambu Lawang was looking for Empu Ete'

Finally, the notion of voice without voice morphology (or Focus without Focus morphology) as discussed in this paper is not trivial theoretically. It may pose a challenge to certain frameworks. This has been discussed in Arka and Kosmas (2005); Richards (2006) and Arka (2009), and will not be repeated here. Among the issues are the nature of the different structures and the processes by which they are derived; e.g. which one is basic and which one is derived, whether the derivation is purely lexical or syntactic, and the precise mechanism of derivation, or whether the notion of structural derivation itself is tenable. The precise and best analysis of voice without voice morphology is a matter of debate.

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